



<http://uuelco.me>
#UUelcome



UUallet™

UUe, to go.

Juking, automated.

by

Link Starbureiy





Presented

@ Missoula Public Library

May 21, 2016

Note: The brevity of the frames highlight the fact that these are truncated notes from a live demonstration, which included audio, visual, and external supplements.

This demo: theory + product (dry sample)

a little about me..

we / impresario



/ legend

creator / 



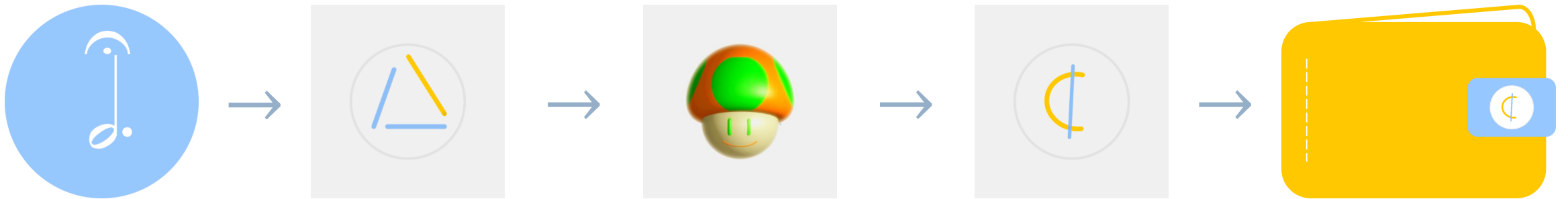
@Lnq 

Note: Both logos represent the same thing
(Egglepple), and may be substituted throughout.

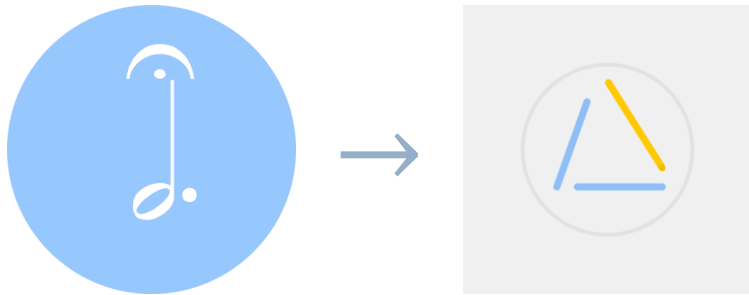


In the context of this article, *egglepple* generally means 'portfolio'
[as in porting a set of leaves (u,u) from one end (recto) to the other
(verso)].

Road map

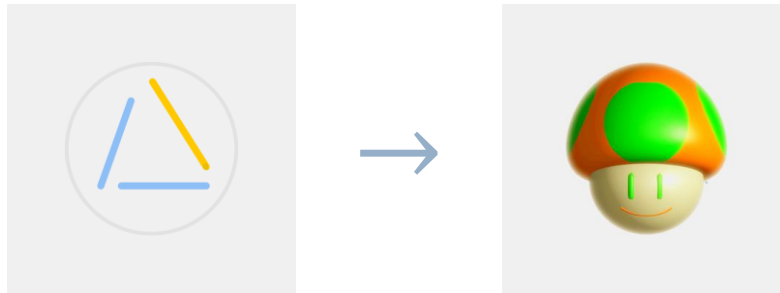


TOS \rightarrow l -string



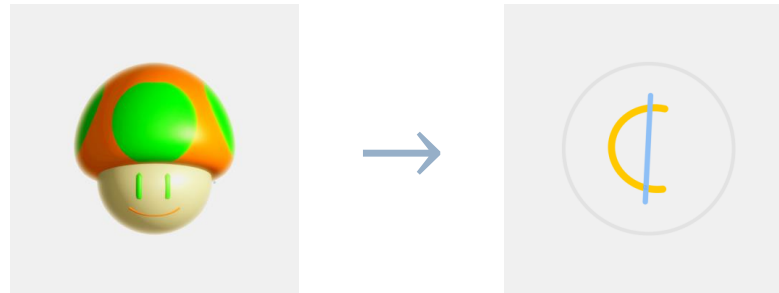
The Origamic Symphony (domain),
coverage of loopy quanta + superstrings

l -string \rightarrow peptide



illustrating loopstring and
polymer congruence

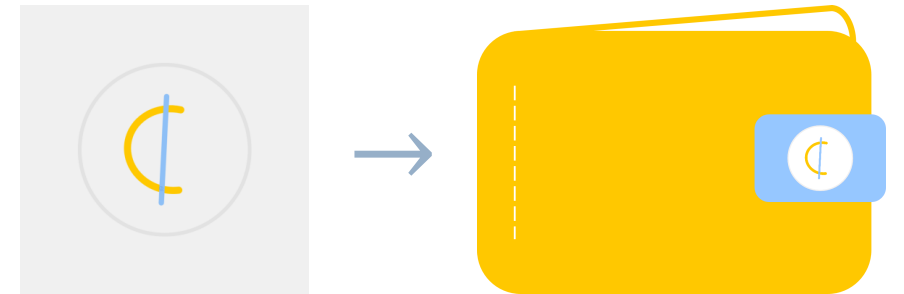
Peptides → MONEY



protein science segues into
cryptocurrency artifice

automation

getting practical



So, let's begin with some
background theory..

loopstring



There's this beautiful symphony
playing *all the time*, and it
happens *everywhere*.



The instrument is a single string called *egglepple*. It spans some twenty-six (26) measures.



The measures cover intervals
accounting from the Planck scale to
the nanoscale. I call this domain

The Origamic Symphony.

[a simulacrum]



Another way to say that is the string (egglepple) extends from the lowest physical level, all the way to hydrogen's introduction.



Since this is a legitimate string of sorts, it is subject to resonances, harmonics, and permutation.



To study these subjects, we're going to need the tools of something called *string theory*.

Note: For purposes of this demo, LQG \in superstrings.



VERY SIMPLE STRINGLISH

- strings are 1D objects of pure energy that can vibrate in multiple 'dimensions'
- universally, there are 4 known forces (weak nuclear (decay), strong nuclear (confinement), electromagnetism (radiation), and gravity (curvature))



VERY SIMPLE STRINGLISH

- the first 3 forces play well in something called the Standard Model. Gravity needs reconciliation.
- part of the problem is that the Standard Model deals with quantum mechanics (probabilities), whereas gravity is immune to stochasticity.



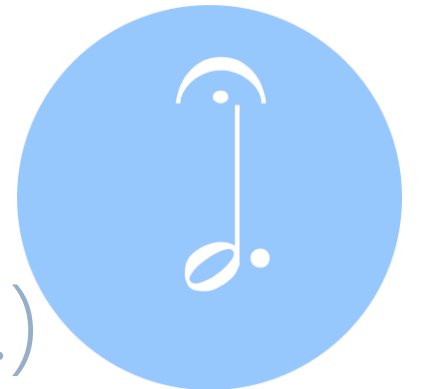
VERY SIMPLE STRINGLISH

- string theory says that given some constraints, gravity can be 'discretized' (quantum gravity)
- unfortunately, the theory requires a landscape that doesn't bode well in Euclidean space-time (3 + 1 dimensions)
- but that's okay once we consider loops!



VERY SIMPLE STRINGLISH

- loop quantum gravity (LQG) or loopy quanta, shows that the world is already discrete *and* stringy in 4D, as long as closed circuits (loops) are considered.
- one would just need to justify the *superstringy* math (i.e., superalgebras, etc.)



VERY SIMPLE STRINGLISH

- strangely (and frustratingly enough), the math does work! This is also to say that *supersymmetry* shouldn't be a pursuit.
- it tends to make more sense when you don't consider the 26 dimensions as *scalars*, but as *measures*.



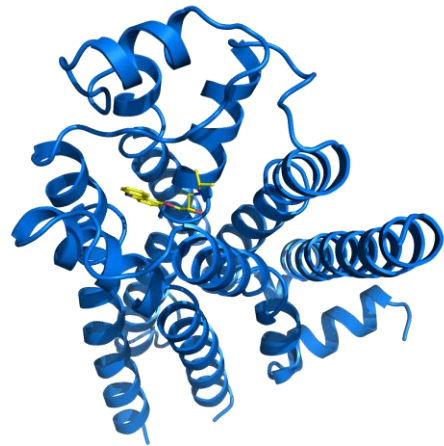
VERY SIMPLE STRINGLISH

- the picture becomes clearer the closer you get to hydrogen [H] (cf., elemental chemistry).
- part of the dilemma is that the subatomic scale deals only in symmetry-breaking and interactions.
- reactivity is needed to fully resolve this.



Proteins are really neat. They're these small *strings* of acids that are chained according to their placement of H, C, N, O, and a few other elements.

example



NOT the toadstool from *Mario Bros.*..
It's a mascot named Mycol Funguy.



The placement of these acids - and the hydrogen bonding between them, dictate how a protein folds. How it folds has everything to do with how it functions.

This is super-important.



Biomechanically, proteins are macromolecular machines that act as the workhorses in practically all cell functions.

They are responsible for everything, from cell growth to transport.



.. and we're talking everything! So, if a protein is misfolded, it can also be the catalyst for diseases, such as cancer, Alzheimer's, ...all kinds of nasty stuff.



So getting the topology right is a crucial undertaking.

Since it's basically string, there's plenty of mathematics that can help us figure out correct fold paths.



But, this is a huge *computational* challenge
(as in, lots of processing power is required).
Dogma says that because the number of
ways a protein can fold is astronomical, it
should take billions of years for
these animation-types to render.



Yet, in reality, folding is on the order of microseconds. So, the conclusion is that 'something' must be happening at the subchem level (i.e., between the atoms).

That 'something' is '*twisting*'.



String theory math uses what's called the Penrose transform, which is kind of like imagining how a bound wire would wrap around a pole. Mathematicians describe this as *sesquilinear* (= 1.5 or *twist*).



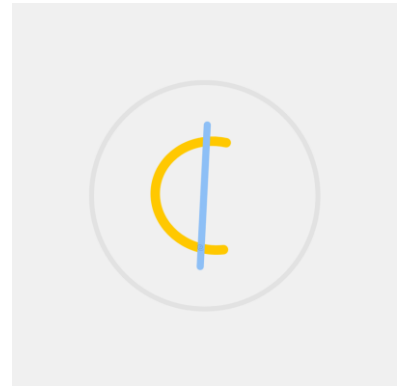
Its official name is *twistor space*.

Suffice it to say that these transforms,
called *twistors*, are chaperones responsible
for the knotting of polymers.



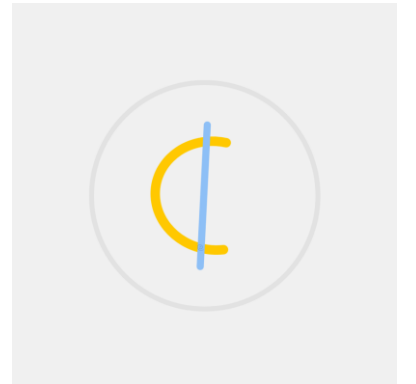
Moving on to foreground
theory..

Double U economics



Key-cryptography is done in a three (3)-act continuum:

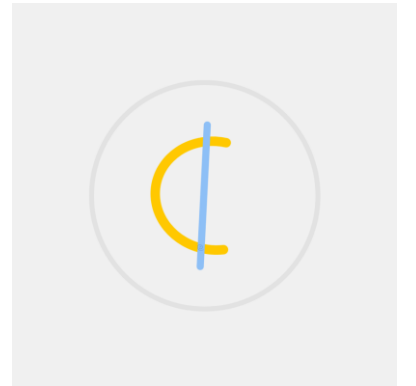
- (1) discrete logarithm
- (2) elliptic curvature
- (3) arithmetic (integer factorization)



For our logarithm, we use a variant of the cent formula (borrowed from music theory):

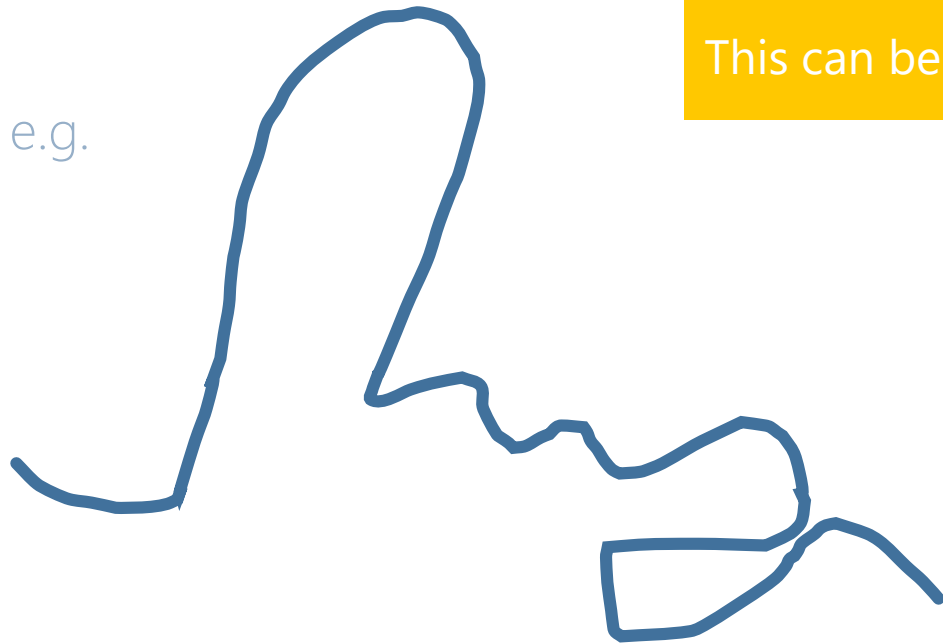
$$\text{cents} = 2600^* \times \log_n(b/a)$$

Technically, it is the number of intervals (as on a diatonic scale) multiplied by 100, and since we have 26 measures ...

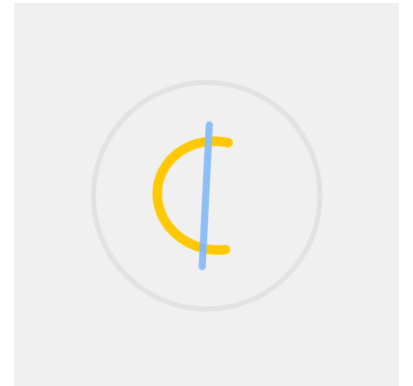


Elliptic curvature (i.e., a line drawn through non-intersecting points as on a 2D graph) is handled with random coiling*.

e.g.

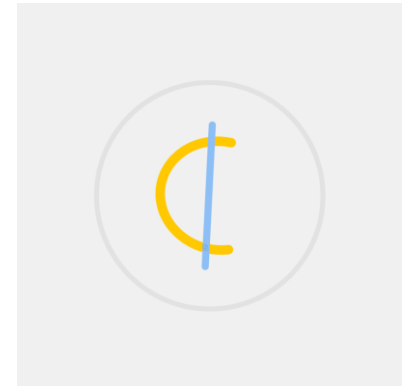


This can be thought of as a *random walk*.



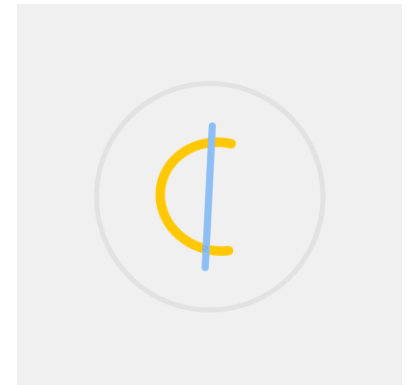
The arithmetic (integer factorization) is just the opus' tablature (i.e., range of frets).

We deduce this from: (*font size* \times *font weight*). The rationale is that economically, this is the multiplier at which a dividend is given.



The continuum is weighted around the relationship between hyper/hypo currencies, known as the **Cryptoquotient** (CQ) (aka *Cryptocurrency Problem*).

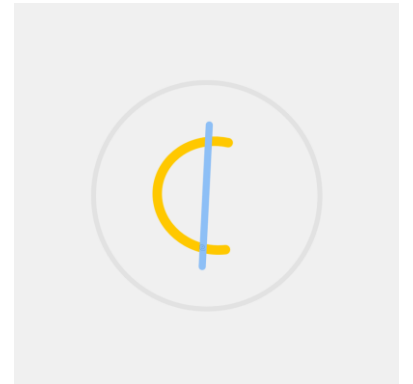
$$\frac{\text{hyper}}{\text{hypo}} = \frac{\text{"cash"}}{\text{"credit"}}$$



CQ seeks to know if there exists a crypto exercise (natural, artificial, or heterotic), that, hypostantially, may anchor a hypercurrency alongside which it can be parimutuelly transacted?

The answer is *yes*.

$$\begin{array}{c} \text{hyper} \\ \hline \text{crypto} \end{array} = \begin{array}{c} \text{"cash"} \\ \hline \text{"credit"} \end{array}$$

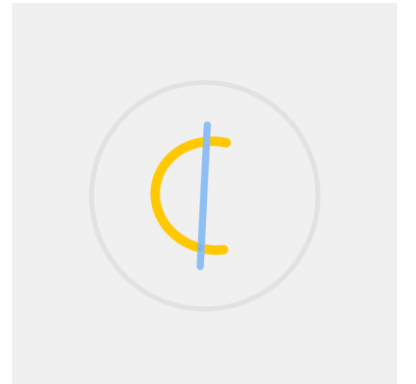


MONEY (Mathematically-Optimized Numismatics' Encrypted Yield) is the cryptocurrency derived from juking.

Note: I call cent values greater than the handicap *bubblegum*.

However, fibor bundling can assist in retrieving the desired outcome.

After obtaining a 0b (totally twisted string), the yield is the attribution of cents drawn from an l -string arrangement.

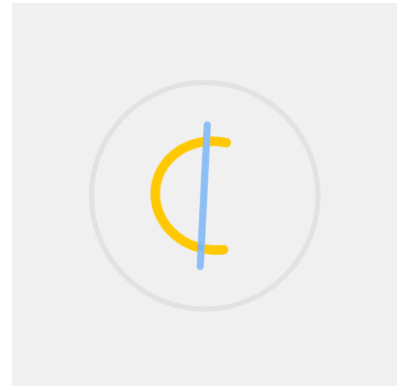


To do this (i.e., close the open string), we use something called 'stew choreography'.



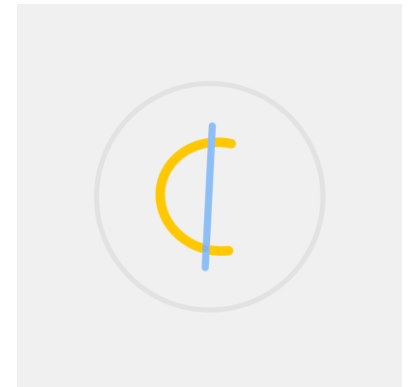
Basically, divvy up a finite portion* of eggplepple into quanta, called 'stews'. Then, simply connect the stews according to certain rules placed forth by proofing.

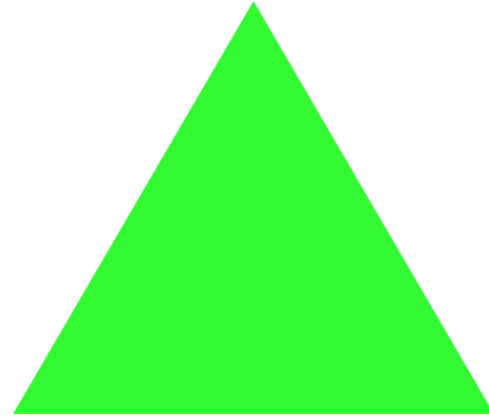
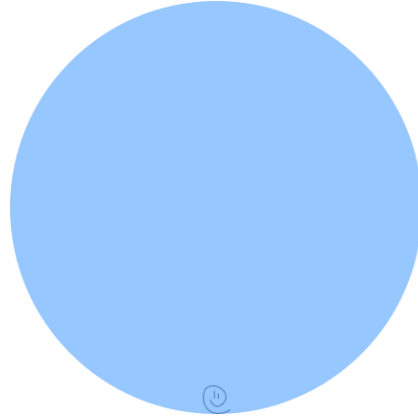
Called *yesegalo*.



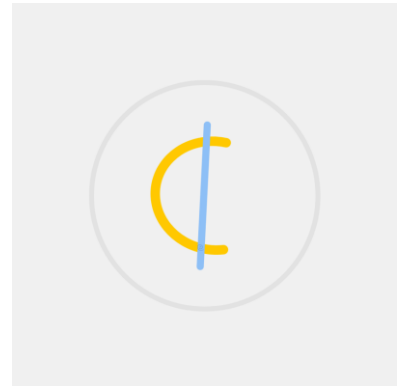
y -proofing* tasks: determine the efficiency of an EGP encryption [i.e., when the minor/major scales are combined and twisted, is the resulting fibor optimal (fit within the handicap) $_{||\sup \leq (u,u)=0||}$?]

y -proof = yesegalo proof



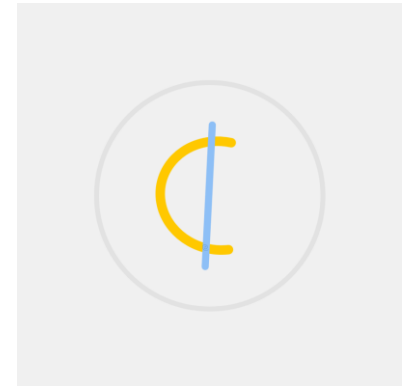


EGP is our keynote (tonic), and the calculus of
egglepple.

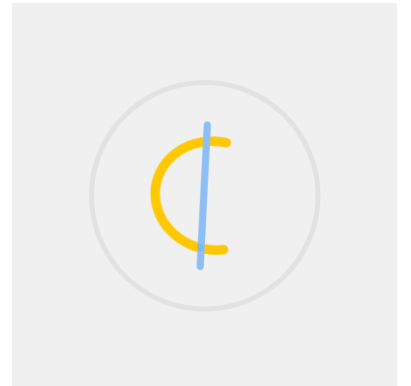


Essentially what we've done in one signature (time) is mimicked the codon sequence (sets of 3) so that it fits into a standard alphabet of 26 letters. [$3^3 = 27 > 26$]

In another signature (key), the letters E, G, and P signify beta sheets, alpha helices, and turns/delta valleys (representing angular change).

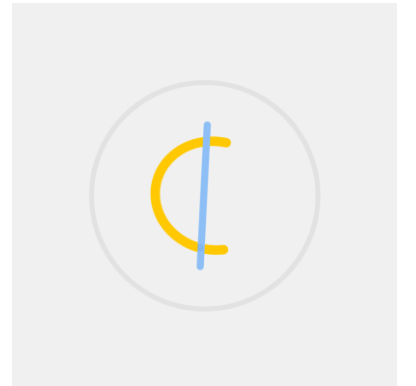


With our alphabet, we can differentiate stews according to combinations of those three letters. For example, let EEE = A, EEP = C, and PEG = T. Putting them together like so: EEP, EEE, PEG spells 'CAT'.



Simple enough. -- That's more-or-less how the genetic code works, as well.

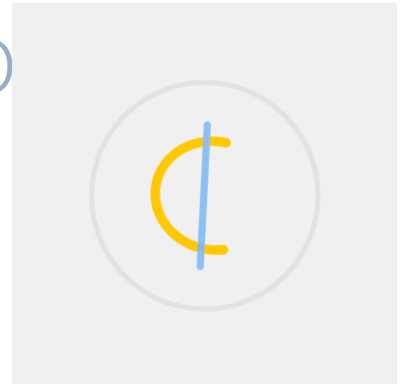
On the shape side, we have to be much more clever.



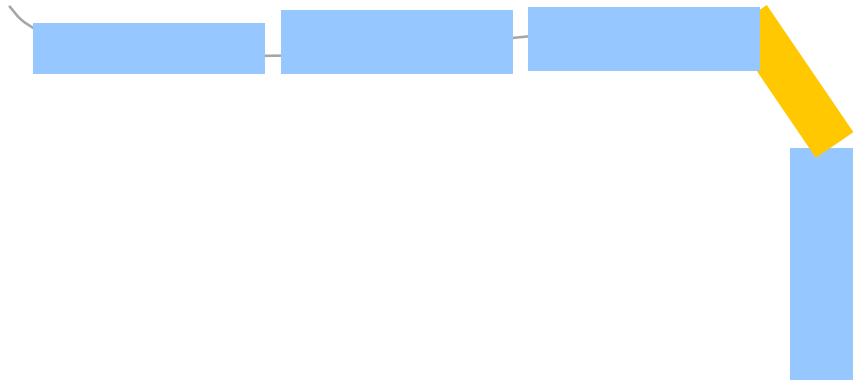


Sheets, helices, and/or turns can be placed anywhere along the string, BUT, keep in mind that we desire to have a fold value that is within the twistor space.

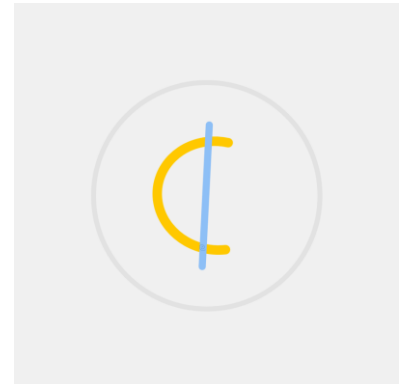
Also note that this is fundamentally music, so a composition cannot be dissonant.



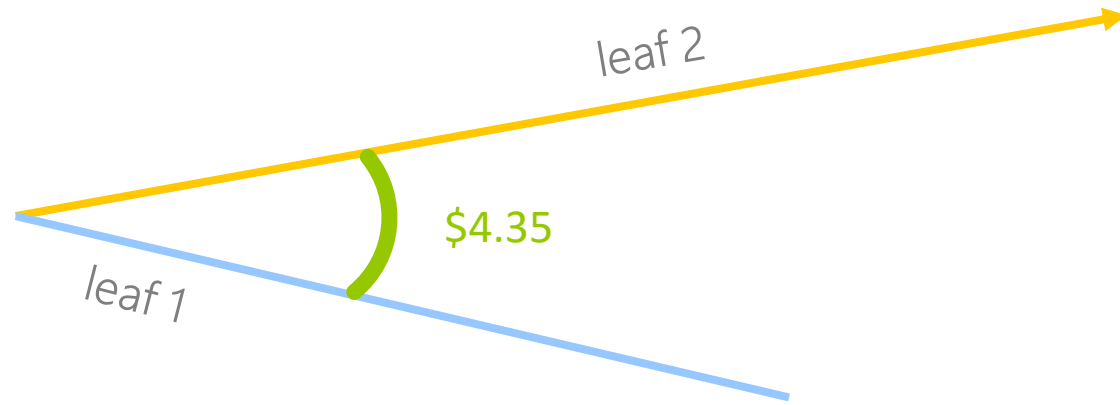
That is to say – to an effect – that you need at least three (3) flageolet pencils to form a *chord*, as it is not possible to break the symmetry of just two (2) adjacent ones.



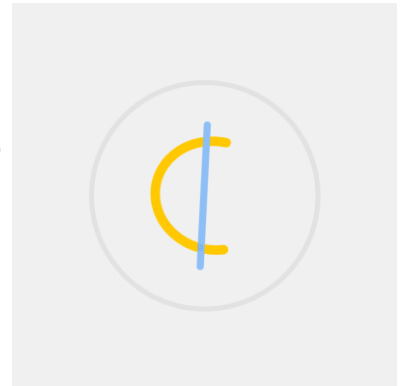
 = flageolet pencil/krayon



To help us, we use our handy logarithm formula to tell us the cent value between each leaf (u,u) conjoin.



Plus, according to the formula, we'll always know our handicap (twistor space), so whatever moves we make should only hedge *that* number.



Onto the product...

Note: This section was a walkthrough of the API. To review, visit the website by touching the logo.





Trivia: Scooby-Doo is a Great Dane. ..Go figure.